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ABSTRACT

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A study was conducted to determine if significant differences existed in academic performance in general studies courses between students who received degrees in special education and students who received degrees in early childhood/elementary education. Subjects (N=284) were students who received a Bachelor of Science in Education degree in either special education or early childhood/elementary education from August, 1990, through May, 1992. Of the total of 284 students who received a degree during this time period, 228 were early childhood/elementary majors, and 56 were special education majors. Participants' transcripts were reviewed to determine the grades obtained in general studies courses required of all students. Data analysis revealed that significant differences existed between the two groups in only two courses. Early childhood/elementary students performed significantly better than special education students in math (college algebra) and geography. The most noteworthy point of this study focuses not so much on existing differences in academic performance between early childhood/elementary and special education majors, but on the homogeneity of both groups. (LL)



"A Comparison of Academic Performance of Special Education Students and Early Childhood/Elementary Education Students on Specific General Education Courses."

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A Comparasion of Academic Performance of Special Education Students and Early Childhood/Elementary Education Students on Specific General Education Courses

The Problem

The decade of the 1980's was tumultuous and significant for education and educational reform. The need for reform was predicated on a number of myths and realities having to do with the training of classroom teachers, the effectiveness of classroom teachers, poor student achievement and the seeming inadequacy of persons entering the field of education. Many influential groups challanged Colleges and Universities to improve training experiences and programs for teachers (e.g., National Commission for Excellence in Teacher Education, 1985; Carnegie Forum, 1986; Holmes Group, 1986).

Resultant from these many reports, questions arose as to the integrity of teacher training programs and the quality of teacher education students. Many reports advocated that education programs attracted the intellectually less facile and academically less talented student (Schlecty & Vance, 1981). Reynolds (1982), has stated that many of these arguments were fostered without appropriate research data to support such claims. Even now, there is a severe paucity of research data available to adequately conceptualize the questions regarding quality of teacher education students. In a previous study, the authors attempted to determine if significant differences existed in academic performance in general studies courses between individuals who received their degrees in education (BSE) and those individuals receiving Bachelor of Science, Bachelor of Arts, and Bachelor of Business Administration decrees (Mainord, Naylor, Atkins & Whorton, 1991). The results of the aforementioned study, while limited in scope, gave credence to the idea of comparisons between students with different education majors on the same general studies courses.

The present study sought to determine if significant differences existed in academic performance in general studies courses between students who received their degrees in Special Education and those students who received their degrees in Early Childhood/Elementary Education.

The Subjects

The subjects selected for this investigation were all (284) students who received their Bachelor of Science in Education (BSE) degrees in Special Education or Early Childhood/Elementary Education from August, 1990 through May, 1992. From the total 284 subjects who received a BSE degree during this time period, 228 were Early Childhood/Elementary majors, and 56 were Special Education majors.

Once the subjects were assigned to one of the two degree categories of Early Childhood/Elementary (EC/ELFM) or Special Education (SPED), their respective transcripts were reviewed to determine the grades they obtained



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in the following general studies' courses: Freshman English 1, Freshman English 11, Freshman History 1, Freshman History 11, Math for General Education, College Algebra, Geography, General Biology, and Physical Science. These courses were selected because they are required of all students pursuing any type of bachelor's degree, and these courses allowed for determination of each subject's performance in a content area.

Table 1 reports the descriptive data for both groups. Mean grade point averages and standard deviations were computed, and a t test was used to determine if significant differences existed between the EC/ELEM group and the SPED group on measures of mean grade point for the nine general studies courses. Table 1 also notes the calculated t's and levels of significance.

Insert Table 1 about here

Summary

As shown in Table 1, the data reviewed revealed several points to be noted. Significant differences existed between the two groups on two of the general studies courses. The EC/ELFM students performed significantly better than the SPED students in Math (College Algebra) and Geography. These observed differences were shown to be significant at the .05 level of confidence.

As it relates to the aforementioned differences, it should be noted that it is the opinion of the authors that the significant difference between the two groups in Geography is probably attributable to sampling error and the limited number of observations of the SPED group (35 as compared to 172 for the EC/ELEM group).

While significant differences were observed between the groups in Math (College Algebra), the mean grade point averages for both groups were in the "C" range; with the EC/ELEM group receiving a mean grade point average of 2.8297, and the SPED group receiveing a mean grade point average of 2.20. It should also be noted that the education majors sampled for this study had the option of taking either College Algebra or Math for General Education to fullfill the math requirement for the bachelor's degree. For those students who opted to take the Math for General Education Course as opposed to College Algebra, the data indicated that there were no significant differences between groups, and both groups achieved their highest grade point averages (3.1 for both groups) in this general studies course.

No significant differences were observed between the two groups on mean grade point averages in seven of the measured general studies courses. As can be seen in Table 1, in most cases, the mean grade point averages for both the EC/ELEM and SPED groups were in the "C" range (except in Math for General Education and a mean grade point average of



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3.1 for the SPED group in Physical Science, which was not significant). The lowest mean grade point average for the EC/ELEM group was observed in Physical Science (2.45), while the lowest observed mean grade point average for the SPED group was in College Algebra (2.20).

Conclusions

In conclusion, perhaps the most noteworthy point of this study focuses not so much on the existing differences in academic performance between Early Childhood/Elementary majors and Special Education majors, but on the homogeneity of both groups. Therefore, it is probably safe to assume, in this instance, that the Early Childhood/Elementary and Special Education majors sampled in this study were very much alike in academic performance in the specific general education courses measured.



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Table 1

EC/ELEM

SPED

			<u> </u>		
Course	Mean	S.D.	Mean	S.D.	t
English 1	2.9469	0.7097	2.9454	0.8031	0.0132
English 2	2.9868	0.8100	2.9107	0.7453	0.6397
History 1	2.6535	0.9377	2.6538	0.9263	-0.0023
History 2	2.6535	0.9377	2.7058	0.9228	-0.3615
${ t Math}({ t Gen})$	3.1157	0.8385	3.1428	0.7051	-0.1587
Coll. Alg	2.8297	0.9115	2.2000	0.7677	2.8774 *
Geography	2.6220	0.8251	2.2571	0.7004	2.4423 *
Biology 1	2.4768	0.9146	2.2978	0.9535	1.2064
Phys. Sci	2.4558	0.7417	3.1304	4.1920	-1.2820

^{* .05} Level of Confidence